AMENDMENT TO THE CLAIMS.

Claim 1. (currently amended): A method of converting glycerol to 1,3-propanediol in a thermophilic organism, the method comprising:

a) providing a thermophilic organism that ferments glycerol to 1,3-propanediol; and

b) culturing the thermophilic organism under conditions such that 1,3-propanediol is produced,

wherein the thermophilic organism is a species of *Caloramator* or a species of *Thermofrachium* and wherein the 16S rDNA of the thermophilic organism is at least 95% identical to the 16S rDNA of the organism deposited as ATCC designation PTA-584.

Claim 2. (original): The method of Claim 1, further comprising the step of collecting 1,3-propanediol produced by the thermophilic organism.

Claim 3. (currently amended): The method of Claim 2, further comprising the step of polymerizing the 1,3- propanediol into a ~~polymer~~ polyester.

Claim 4. (currently amended): The method of Claim 3, wherein the ~~polymer~~ polyester is poly(1,3-propylene terephthalate) (PPT).

Claims 5 - 45 (previously canceled)

Claim 46. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured under anaerobic conditions.

Claim 47. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured under nitrogen.

Claim 48. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured under argon.

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Claim 49. (currently amended): The method of Claim 1, wherein the thermophilic organism is cultured under a mixture of nitrogen ~~and~~ to carbon dioxide in a ratio of about 80 to about 20.

Claim 50. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured in the presence of an oxygen scavenger.

Claim 51. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured in an anaerobic chamber.

Claim 52. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured under microaerobic conditions.

Claim 53. (previously added): The method of Claim 2, wherein the collected 1,3-propanediol is further purified.

Claims 54 - 56 (canceled)

Claim 57. (previously added): The method of Claim 1, wherein the 16S rDNA of the thermophilic organism is at least 99% identical to the 16S rDNA of the organism deposited as ATCC designation PTA-584.

Claim 58. (previously added): The method of Claim 1, wherein the thermophilic organism is adsorbed on a solid support.

Claim 59. (previously added): The method of Claim 1, wherein the thermophilic organism is cultured under aerobic conditions.

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Claim 60. (new): An isolated culture or cells of the organism deposited as ATCC designation PTA-584.

Claim 61. (new): A progeny of the isolated culture or cells of the organism deposited as ATCC designation PTA-584.

Claim 62. (new): A method of converting glycerol to 1,3-propanediol in a strain of *Caloramator viterbiensis,* the method comprising:

a) providing a thermophilic strain of *Caloramator viterbiensis* having the following characteristics i) a temperature range for growth at pH 6.0 of 33 to 64°C and ii) ferments glycerol to 1,3-propanediol; and

b) culturing the thermophilic strain of *Caloramator viterbiensis* under conditions such that 1,3-propanediol is produced.